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| TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i> | | Application No. | 10/676,310 |
| | | Filing Date | September 30, 2003 |
| | | First Named Inventor | Stephan Jourdan |
| | | Art Unit | 2183 |
| | | Examiner Name | Brian P. Johnson |
| Total Number of Pages in This Submission | 10 | Attorney Docket Number | 42P17034 |

| ENCLOSURES (check all that apply) | | |
|--|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> PTO/SB/08 <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Basic Filing Fee <input type="checkbox"/> Declaration/POA <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) <input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <div style="border: 1px solid black; padding: 5px; margin-top: 5px;">return postcard</div> |
| Remarks | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|---|
| Firm or Individual name | Jonathan S. Miller, Reg. No. 48,534 BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP |
| Signature | |
| Date | April 19, 2007 |

| CERTIFICATE OF MAILING/TRANSMISSION | | | |
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| Typed or printed name | Melissa Stead | | |
| Signature | | Date | April 19, 2007 |

APR 23 2007

**FEE TRANSMITTAL
for FY 2006**

Patent fees are subject to annual revision.

Complete if Known

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|----------------------|--------------------|
| Application Number | 10/676,310 |
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| First Named Inventor | Stephan Jourdan |
| Examiner Name | Brian P. Johnson |
| Art Unit | 2183 |
| Attorney Docket No. | 42P17034 |

☐ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT (\$) 500.00

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit card ☐ Money Order ☐ None ☐ Other (please identify): _____☒ Deposit Account Deposit Account Number: 02-2666 Deposit Account Name: Blakely, Sokoloff, Taylor & Zafman LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee


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FEE CALCULATION

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|---------------------------|----------|--------------|----------|--|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| 1052 | 50 | 2052 | 25 | Surcharge - late provisional filing fee or cover sheet. | |
| 2053 | 130 | 2053 | 130 | Non-English specification | |
| 1251 | 120 | 2251 | 60 | Extension for reply within first month | |
| 1252 | 450 | 2252 | 225 | Extension for reply within second month | |
| 1253 | 1,020 | 2253 | 510 | Extension for reply within third month | |
| 1254 | 1,590 | 2254 | 795 | Extension for reply within fourth month | |
| 1255 | 2,160 | 2255 | 1,080 | Extension for reply within fifth month | |
| 1401 | 500 | 2401 | 250 | Notice of Appeal | |
| 1402 | 500 | 2402 | 250 | Filing a brief in support of an appeal | 500.00 |
| 1403 | 1,000 | 2403 | 500 | Request for oral hearing | |
| 1451 | 1,510 | 2451 | 1,510 | Petition to institute a public use proceeding | |
| 1460 | 130 | 2460 | 130 | Petitions to the Commissioner | |
| 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | |
| 1809 | 790 | 1809 | 395 | Filing a submission after final rejection (37 CFR § 1.129(a)) | |
| 1810 | 790 | 2810 | 395 | For each additional invention to be examined (37 CFR § 1.129(b)) | |
| Other fee (specify) _____ | | | | | |
| | | | | SUBTOTAL (2) | (500.00) |

SUBMITTED BY

Complete (if applicable)

| | | | | | |
|-------------------|---|--------------------------------------|--------|-----------|----------------|
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| Signature |  | | | Date | 9/19/07 |

Based on PTO/SB/17 (12-04) as modified by Blakely, Sokoloff, Taylor & Zafman (wlr) 12/15/2004.
SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450



PATENT
Attorney's Docket No. 42P17034

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application for:

Stephan Jourdan, et al.

Serial No.: 10/676,310

Filed: September 30, 2003

For: **DETERMINATION OF WHETHER ONE
OR MORE MICRO OPERATIONS
BELONG TO A BRANCH PATH THAT IS
DEPENDENT ON A MISPREDICTED
BRANCH BASED ON ASSIGNED
IDENTIFICATION**

Examiner: Brian P. Johnson

Art Unit: 2183

Confirmation No.: 8184

REPLY BRIEF

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants (hereinafter “Appellants”) submit one copy of the following Reply Brief pursuant to 37 C.F.R. § 41.41 for consideration by the Board of Patent Appeals and Interferences. Please charge any additional amount due or credit any overpayment to deposit Account No. 02-2666.

04/23/2007 55ESHE1 00000083 10676310 500.00 DP
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ARGUMENT

In the Examiner's Answer ("Answer") to Appellants' Appeal Brief ("Brief") filed November 9, 2006, the Examiner maintains the rejection of claims 1-2, 6-13 and 17-22 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,065,115 issued to Sharangpani et al. (Sharangpani) and claims 3-5 and 14-16 under 35 U.S.C. § 103(a) as being unpatentable over Sharangpani in view of U.S. Patent Application Publication No. 2003/0061258 to Rodgers et al. (Rodgers). Appellants respectfully disagree with the Examiner's position for at least the following reasons.

Appellants respectfully submit, for at least the reasons previously set forth and those herein, neither Sharangpani nor Rodgers, alone or in combination, teach or suggest each element of claims 1-22.

I. The Examiner Fails to Establish that Sharangpani Anticipates Claims 1-2, 6-13, and 17-22 Under 35 U.S.C. § 102(b) Because Sharangpani Fails to Disclose Assigning an ID for Each uop

The Examiner has maintained the rejection of claims 1-2, 6-13 and 17-22 under 35 U.S.C. § 102(b) as being anticipated by Sharangpani. Appellants respectfully disagree with the rejection and submit that claims 1-2 and 6-9 (e.g., as claims 2 and 6-9 depend from claim 1) are allowable for at least the reason that Sharangpani does not disclose "assigning an identification number (ID) to *each of a plurality of micro-operations* (uops)" (emphasis added) as required by independent claim 1.

The Examiner has mischaracterized the teaching of Sharangpani and failed to read claim 1 as a whole. In interpreting the claim language, the words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification. See MPEP § 2111.01. Further the claim must be considered as a whole and every limitation in the claim must be considered. See Diamond v. Diehr, 450 U.S. 175, 188-89 (1981). From the plain meaning of the words, the cited claim language as a whole explicitly requires that a separate ID is assigned "to *each of a plurality of micro-operations* (uops)" (emphasis added). In contrast, Sharangpani does not assign a separate

tag to each instruction included in the instruction stream, but instead assigns *a single tag* to a group of instructions. See Sharangpani, column 6, lines 6-8. For example, Figure 5 of Sharangpani discloses assigning tag 504 that identifies the instruction stream (i.e., the group of instructions) to instruction pointer 502. See Sharangpani, column 10, lines 12-14. Thus, Sharangpani teaches a *single assignment to a group of instructions* rather than an assignment “*to each of a plurality of micro-operations (uops)*” (emphasis added) as required in claim 1. Therefore, considering the plain meaning of the words and considering the cited claim language as a whole, Sharangpani fails to disclose “assigning an identification number (ID) to each of a plurality of micro-operations (uops)” as recited in claim 1. Therefore, for at least these reasons, Sharangpani fails to teach each element of claim 1. Accordingly, Appellants respectfully request the Board overturn the rejection above for claims 1-2 and 6-9.

The Examiner stated on page 10 of the Answer that “Appellant admits that Sharangpani discloses this limitation.” Appellants disagree with the Examiner’s assertion. Rather, Appellants are illustrating the differences between Sharangpani’s pointer based determination of the branch path for a group of instructions with Appellants’ assigned ID number for each uop to identify the branch path. Moreover, in analyzing the cited claim language, the cited claim language must be given its plain meaning and must be considered as a whole. As discussed previously, under this analysis of the cited claim language, Sharangpani fails to teach an assignment “to each of a plurality of micro-operations (uops)” as recited in claim 1. See Sharangpani, column 10, lines 6-14 and Figure 5. Thus, for at least the reasons discussed above, Sharangpani fails to teach each element of claim 1.

Further, the Examiner stated on page 10 of the Answer that it was improper to read Appellants’ Specification into the cited limitation of claim 1. Appellants do not rely on any material from the Specification for interpreting the claim. Rather, Appellants are considering the language as a whole and giving the terms therein their plain meaning. Any discussion of the Specification is for illustration purposes. As discussed above, under the proper interpretation of the cited claim language, Sharangpani fails to teach “assigning an identification number (ID) to each of a plurality of micro-operations (uops)” as required in claim 1. See Sharangpani, column 10, lines 6-14 and Figure 5.

Thus, the Examiner has unreasonably concluded that a particular portion of Appellants' Specification was required to interpret the claim language.

Appellants also respectfully disagree with the rejection above and submit that claims 10-13, 17-18 (e.g., as claims 11-13 and 17-18 depend from claim 10), and 19-22 (e.g., as claims 20-22 depend from claim 19) are allowable for at least the reason that Sharangpani does not disclose "an allocator to assign a plurality of micro-operations (uops) identification numbers (IDs), each ID to identify a branch path to which the uop belongs" as required by independent claims 10 and 19. From the plain meaning of the words of this limitation, the cited claim language as a whole requires the allocator to assign a separate ID to each of a plurality of micro-operations. Therefore, an argument analogous to the one above for claim 1 applies for the allocator of claims 10 and 19 as well. Hence, for at least the reasons noted above for claim 1, the cited reference does not disclose the cited limitation of claims 10 and 19. Thus, Appellants respectfully request the Board overturn the rejection above of claims 10-13, 17-18, and 19-22.

II. The Examiner Fails to Establish that Claims 3-5 and 14-16 are Obvious Over Sharangpani in View of Rodgers Because Rodgers Changes The Principle of Operation of Sharangpani

The Examiner has maintained the rejection of claims 3-5 and 14-16 under 35 U.S.C. §103(a) as being obvious over Sharangpani in view of Rodgers. As stated in MPEP § 2143.02(VI):

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Appellants respectfully disagree with the rejection and submit that claims 3-5 and 14-16 are allowable for at least the reason that the combination of Sharangpani in view of Rodgers would change the principle of operation of Sharangpani.

The Examiner asserted on page 11 of the Answer that "the technique of Rodgers saves all required information *with the instruction*, making retirement analysis and debugging strategies very simple" (emphasis added). However, the technique of Rogers changes Sharangpani's principle of operation. Sharangpani teaches a principle of operation that

analyzed to determine which instruction stream will be retired. See Sharangpani, column 10, lines 18-20 and 32-39. In contrast, Rodgers discloses assigning a sequence number and status information *to each microinstruction*. See Rodgers, paragraph [0064], [0080]. Rodgers then analyzes the sequence number and the status information of each microinstruction to determine the microinstructions for retirement. Rodgers, paragraph [0083]. In other words, in Rodgers, the system must analyze *each microinstruction* by sequence number and status information before committing microinstructions for retirement. Sharangpani simply checks tag field 504 to determine the group of instructions for retirement. Therefore, Sharangpani *does not require an individual analysis of each instruction* of the instruction stream for retiring instructions. Thus, Sharangpani's principle of operation would then be changed by Rodgers because there is no assignment and analysis of each individual instruction required by Sharangpani. Therefore, Rodgers changes Sharangpani's principle of operation of assigning a tag to *a group of instructions* for retirement. For at least these reasons, the combination of Sharangpani and Rodgers would be improper.

Thus, one of ordinary skill in the art would not be motivated to combine Sharangpani with Rodgers to provide the limitations of claim 1 because the combination of Sharangpani in view of Rodgers would change the principle of operation of Sharangpani. Therefore, the Examiner has failed to establish a *prima facie* case of obviousness as stated in MPEP § 2143.02(VI). Accordingly, for at these reasons, Appellants respectfully request the Board overturn the rejection above for claims 3-5 and 14-16.

CONCLUSION AND RELIEF

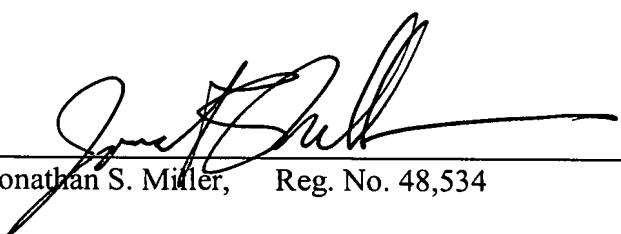
Accordingly, since the references fail to teach or suggest at least the above-discussed elements, it is submitted that the rejections of claims 1, 3-7 and 10-22 based on 35 U.S.C. §§ 102 and/or 103 be overturned.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Dated: April 19, 2007

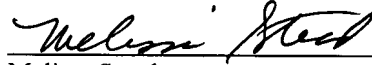
By: _____


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Melissa Stead

4-19-07